

**CLAIMS:**

Sub B1  
18. A method for manufacturing a stator with a stator winding for a rotating electric machine, comprising the steps of:

drawing a high-voltage cable having an outer semi-conducting layer through a first slot and a second slot in the stator so as to form a part of the stator winding, including

inserting said high-voltage cable through at least one of said first slot and said second slot while a spring member therein being deactivated, said at least one of said first slot and said second slot being a supporting slot; and

( activating said spring member after said inserting step.

19. A method according to claim 18, further comprising the steps of:

supporting the spring member with a slot wall of said supporting slot;

positioning a support body between the spring member and at least one cable lead-through; and

pressing the support body against said at least one cable lead-through.

20. A method according to claim 19, further comprising the steps of:

arranging another spring member on another slot wall of said supporting slot, said another slot wall being opposite to said slot wall and immediately opposite to said spring member;

positioning another support body between the another spring member and said at least one cable lead-through; and

pressing said second support body against said at least one cable lead-through.

21. A method according to claim 19, further comprising a step of:

( arranging a pressure member between said support body and said another slot wall and pressing said pressure member against said spring member via said support body.

22. A method as claimed in claim 20, further comprising a step of:

arranging a pressure member between the support body and another support body and pressing the pressure member by way of said support body and said another support body against the spring member and the another spring member.

23. The method of claim 21, wherein:

said arranging step comprises arranging said pressure member so as to deactivate said spring member and activating said spring member when removing the pressure member.

24. A method according to claim 22, wherein:

said arranging step comprises arranging said pressure member so as to deactivate said spring member and activating said spring member when removing the pressure member.

25. A method as claimed in claim 18, further comprising a step of:

disposing said spring member in said supporting slot, wherein said spring member comprises a corrugated, laminated, plate spring.

26. A method as claimed in claim 25, wherein:

said arranging step, includes deactivating the spring member by gluing the corrugated, laminated, plate spring to a flat surface so as to have the corrugated, laminated, plate spring acquire a flat shape, and said activating step includes releasing a glue joint formed in said gluing step.

27. A method as claimed in claim 26, wherein:

said gluing step includes gluing said corrugated, laminated, plate spring to an inside of a slot lid fitted at a radially inwardly directed opening of the supporting slot.

28. A method as claimed in claim 26, wherein:

said releasing step includes releasing the glue joint by heating the glue joint with heat generated in the high-voltage cable.

29. A method as claimed in claim 27, wherein:

said releasing step includes releasing the glue joint by knocking against an outside of the slot lid.

30. A method as claimed in claim 18, further comprising a step of:

disposing said spring member in said supporting slot, wherein said spring member extends substantially along an entire axial extension of the stator.

31. A rotating electric machine comprising:

a stator having a slot;

a winding having a high-voltage cable being drawn through said slot, wherein said high-voltage cable having

an insulation system with an inner semiconducting layer, an outer semiconducting layer, and a solid insulation disposed between said inner semiconducting layer and said outer semiconducting layer, said inner semiconducting layer and said outer semiconducting layer each constituting an equipotential surface; and

a corrugated, laminated plate spring biased against a cable lead-through of said high-voltage cable so as to press against said cable lead-through.

32. A machine as claimed in claim 31, wherein:  
at least one of said inner semiconducting layer and said outer semiconducting layer  
having a same coefficient of thermal expansion as said solid insulation.

33. A rotating electric machine as claimed in claim 31, wherein:  
said corrugated, laminated plate spring being arranged between a slot wall of said slot  
and a support member which is held by being pressed by the corrugated, laminated plate  
spring against the cable lead-through.

34. A rotating electric machine as claimed in claim 31, wherein:  
said corrugated, laminated plate spring being arranged between a slot lid fitted on an  
inwardly directed opening of the slot and a radially innermost cable lead-through.

35. A rotating electric machine as claimed in claim 31, wherein:  
said corrugated, laminated plate spring having a shape that extends along substantially  
a whole axial extension of the stator.

508  
B3

36. A rotating electric machine comprising:  
a stator having a slot;  
a high-voltage winding disposed in said slot, having  
means for conducting an electrical current in said high-voltage winding,  
means for electrically insulating said means for conducting, said means for  
electrically insulating having,  
means for creating a first equipotential surface around said means for  
conducting,  
means for creating a second equipotential surface around said means  
for creating the first equipotential surface, and  
means for separating said first equipotential surface from said second  
equipotential surface; and  
means for exerting a pressure against said winding in said slot.